

REMARKS

By the present amendment and response, independent claims 1 and 14 and dependent claims 13 and 25 have been amended to overcome the Examiner's objections and claims 2 and 24 have been canceled. Thus, claims 1, 3-15, 17-23, and 25 remain pending in the present application. Reconsideration and allowance of pending claims 1, 3-15, 17-23, and 25 in view of the following remarks are requested.

The Examiner has rejected claims 1, 3, 6-12, and 14-23 under 35 USC §102(b) as being anticipated by U.S. patent number 5,436,177 to Chiara Zaccherini ("Zaccherini"). For the reasons discussed below, Applicant respectfully submits that the present invention, as defined by amended independent claims 1 and 14, is patentably distinguishable over Zaccherini.

The present invention, as defined by amended independent claim 1, teaches, among other things, "doping a portion of said layer over said field oxide region with a third dopant so as to form a high-doped region in said layer over said field oxide region," and "fabricating a contact region for said high resistivity resistor over said high-doped region." As disclosed in the present application, after formation of a high resistivity resistor in a polycrystalline layer over a field oxide region, a silicide blocking layer is formed over the polycrystalline layer situated over the field oxide region while leaving portions of the polycrystalline layer situated over the field oxide region uncovered by the silicide blocking layer. P+ doped regions are then formed by heavily doping the uncovered portions of the polycrystalline layer situated over the field oxide region with a

P type dopant and silicide contact regions are formed over the P+ doped regions so as to provide electrical connectivity for the high resistivity resistor. Thus, by forming silicide contact regions over P+ doped regions, the present invention advantageously achieves a high resistivity resistor having improved electrical connectivity.

In contrast to the present invention as defined by amended independent claim 1, Zaccherini does not teach, disclose, or suggest “doping a portion of said layer over said field oxide region with a third dopant so as to form a high-doped region in said layer over said field oxide region,” and “fabricating a contact region for said high resistivity resistor over said high-doped region.” Zaccherini specifically discloses forming P doped resistors in predetermined area 8 of polycrystalline layer 7 overlying field oxide 5. See, for example, Zaccherini, column 3, lines 15-23. However, Zaccherini fails to teach, disclose, or suggest doping a portion of a layer over a field oxide region with a dopant so as to form a high-doped region in the layer over the field oxide region and fabricating a contact region for a high resistivity resistor over the high-doped region.

For the foregoing reasons, Applicant respectfully submits that the present invention, as defined by amended independent claim 1, is not suggested, disclosed, or taught by Zaccherini. As such, the present invention, as defined by amended independent claim 1, is patentably distinguishable over Zaccherini. Thus claims 3 and 6-12 depending from amended independent claim 1 are, *a fortiori*, also patentably distinguishable over Zaccherini for at least the reasons presented above and also for additional limitations contained in each dependent claim.

The present invention, as defined by amended independent claim 14, teaches, among other things, "doping a portion of said resistor region of said polycrystalline silicon layer with a third dopant so as to form a high-doped region in said resistor region," and "fabricating a contact region over said high-doped region in said resistor region of said polycrystalline silicon layer, said contact region being electrically connected to said resistor region." Amended independent claim 14 includes similar limitations as recited in amended independent claim 1. Thus, for similar reasons as discussed above, Applicant respectfully submits that the present invention, as defined by amended independent claim 14, is not suggested, disclosed, or taught by Zaccherini. As such, the present invention, as defined by amended independent claim 14, is patentably distinguishable over Zaccherini. Thus claims 15 and 17-23 depending from amended independent claim 14 are, *a fortiori*, also patentably distinguishable over Zaccherini for at least the reasons presented above and also for additional limitations contained in each dependent claim.


The Examiner has further rejected claims 2, 4-5, 13, and 24-25 under 35 USC §103(a) as being unpatentable over Zaccherini in view of U.S. patent number 6,165,861 to Liu et al. ("Liu"). As discussed above, amended independent claims 1 and 14 are patentably distinguishable over Zaccherini and, as such, claims 4-5, and 13 depending from amended independent claim 1 and claim 25 depending from amended independent claim 14 are, *a fortiori*, also patentably distinguishable over Zaccherini for at least the reasons presented above and also for additional limitations contained in each dependent claim. Moreover, the features of amended independent claims 1 and 14, for example,

doping a portion of a resistor region of a polycrystalline layer or a layer over a field oxide region with a third dopant so as to form a high-doped region in the resistor region or in the layer over the field oxide region, and fabricating a contact region over the high-doped region, are not suggested, disclosed, or taught anywhere in Liu. As such, amended independent claim 1 and dependent claims 4-5 and 13 and amended independent claim 14 and dependent claim 25 are also patentably distinguishable over Zaccherini in combination with Liu.

Based on the foregoing reasons, the present invention, as defined by amended independent claims 1 and 14 and claims depending therefrom, is patentably distinguishable over the art cited by the Examiner. Thus, claims 1, 3-15, 17-23, and 25 pending in the present application are patentably distinguishable over the art cited by the Examiner. As such, and for all the foregoing reasons, an early allowance of claims 1, 3-15, 17-23, and 25 pending in the present application is respectfully requested.

Respectfully Submitted,
FARJAMI & FARJAMI LLP

Date: 8/18/03


Michael Farjami, Esq.
Reg. No. 38, 135

Michael Farjami, Esq.
FARJAMI & FARJAMI LLP
16148 Sand Canyon
Irvine, California 92618
Telephone: (949) 784-4600
Facsimile: (949) 784-4601

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date of Deposit: 8/18/03

Lori Hlave
Name of Person Mailing Paper and/or Fee

Lori Hlave 8/18/03
Signature Date